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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,201	03/10/2004	Noboru Segawa	086531-0136	2432

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EXAMINER	
HENDRICKSON, STUART L	
ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
06/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,201	SEGAWA ET AL.	
	Examiner	Art Unit	
	Stuart Hendrickson	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-18,20 and 21* is/are pending in the application.

4a) Of the above claim(s) *4-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-18, 20, 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The RCE is accepted.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-18, 20, 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13 and 20, "platinum based…' lacks antecedent and is unclear if Pt is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-18, 20, 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no description of how the Pt catalyst was made, however this is now recited and argued as a crucial aspect of the invention. If the catalyst was purchased commercially, then it is not seen how it can be said to be an inventive catalyst. Comparison to the prior art is not possible. Critical features must be adequately disclosed, ie, how to make the catalyst of the claimed invention.

Claims 13, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cirillo et al., in view of Abe et al., Takahashi, et al., Dunne, Yamada et al., Heck et al., Lee et al. and Hamner et al. 4923841.

These claims are rejected for the reasons given in the prior action, further noting that Hamner provides evidence that the Pt size is the same; note col. 5, 7, fig. 5 and the very large range encompassed by the claims. Lee was previously discussed in context of claim 19, now incorporated into claim 1 and also teaches the claimed Pt size and reasons why it is expected to be inherently possessed or at worst obvious as a matter of optimization.

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references above as applied to claims 13, 18, 20 and 21 above, and further in view of Zey et al. 3745751.

The above do not teach deodorizing, however Cirillo teach the presence of SO2, an odoriferous molecule. Zey establishes that ozone reacts with this (even though Cirillo does not appear to recognize this and thus has additional means for S removal), so the claimed feature is met by Cirillo.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references directly above as applied to claims 13-16, 18, 20 and 21, and further in view of Weinberg. Noting that Cirillo in fact deodorizes, this is for all intents and purposes the same rejection as applied in the prior Office Action.

Claims 13-15, 18, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornwell in view of Abe, Takahashi, Dunne, Yamada, Heck, Lee and Hamner et al.
This is the same rejection as applied in the prior Office action, noting that Cornwell teaches treating ammonia. This is identified by the applicant (notwithstanding the error of listing ‘ammonium’ as a compound on pg. 17) as a gas they also treat, so claim 14 is met. Note that Hamner provides evidence that the Pt size is the same; note col. 5, 7, fig. 5 and the very large range encompassed by the claims. Lee was previously discussed in context of claim 19, now

incorporated into claim 1 and also teaches the claimed Pt size and reasons why it is expected to be inherently possessed or at worst obvious as a matter of optimization.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the above references as applied to claims 13-15 above, and further in view of Cirillo.

This is the same rejection as applied in the prior Office Action, for all intents and purposes.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornwell in view of Abe, Takahashi, Dunne, Yamada and Heck as applied to claims 13-15 above above, and further in view of Weinberg.

This is the same rejection as applied in the prior Office Action, for all intents and purposes.

Claims 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holter et al. 4451435 taken with Falke et al. 5145822 and in view of Hamner et al.

Holter teaches the same general scheme as claimed, but does not teach the same catalyst. Holter teaches Sox removal (deodorization). Falke teaches, especially in col. 2, 4, 5 a Pt-Cu-Mn honeycomb catalyst for the same purpose. It is of no moment which metal is said to function in which role. Choosing this catalyst from the disclosure of Falke is an obvious matter of optimization. Hamner, above, indicates that the catalyst of Falke has the claimed size.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the catalyst of Falke in the process of Holter because doing so performs the desired gas purification.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holter/Falke/Hamner as applied to claim 13 above, and further in view of Cirillo and Weinberg .

Claims 14-17 relate to the generation of ozone. This has been discussed above by the additional references, said discussions incorporated herein. Cirillo teaches ozone generators in col. 3. Weinberg teaches corona discharge. The examiner takes Official Notice that the ozone generators claimed are conventional. Using these devices are obvious expedients to create the ozone desired by Holter. No patentability is seen in these claims.

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

Previous arguments apply. New rejections have been made in response to the issues raised. Applicant should show a difference in the catalyst.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/
examiner Art Unit 1793